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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,897	06/16/2005	Richard M Miller-Smith	GB 020249	6583

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EXAMINER

CHOKSHI, PINKAL R

ART UNIT

PAPER NUMBER

2623

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,897

Applicant(s)

MILLER-SMITH ET AL.

Examiner

PINKAL CHOKSHI

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 16 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention does not fall within at least one of the four categories of patent eligible subject matter above. Claim 13 claims a program and program itself cannot be patented.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 4, 7-10 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0152473 A1 to Unger et al (hereafter referenced as Unger) in view of admitted prior art US Patent 6,292,943 B1 to Shin et al (hereafter referenced as AAPA).

Regarding **claim 1**, "a power control method for a set top box, the set top box having an ON power mode and a STAND BY power mode and being in

communication with a television set" reads on a low power receiver system (abstract) disclosed by Unger and represented in Fig. 3.

As to "the method comprising: monitoring a parameter of an operating signal associated with the television set" Unger discloses (§0029 and claim 16) that the receiver monitors a user input device (television w/ remote control) for a power on instruction.

As to "comparing the value of the parameter with predetermined values at which the set top box is desired to be either operative (ON power mode) or inoperative (STAND BY power mode)" Unger discloses (§0029) that the power switch turns on/off, based on the predetermined level of broadcast signal received the receiver. Based on the predetermined level, when the signal rises, receiver turns on.

Unger meets all the limitations of the claim except "when a predetermined value of the parameter is detected, evaluating the current power mode of the set top box and if this is not the desired power mode, initiating a change in operation of the set top box from its current power mode to the desired power mode." However, AAPA discloses (col.3, lines 19-33) that a VCR connected to STB sets a specific time to record a program. On that specific time, it starts recording program received from STB; however, if STB is off, then it powers on STB and starts recording the program. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to change the power status to

on/off based on an apparatus attached to it as taught by AAPA in order to control the channel selection and power control to save energy (col.1, lines 34-35).

Regarding **claim 4**, "a power control method wherein a predetermined value corresponds to a minimum above which the TV set is known to be switched on" Unger discloses (§0029) that if the amplitude of the signal rises above a predetermined level, then the rise in amplitude is a wake up instruction.

Regarding **claim 7**, "a method wherein the operating signal is the line scan of images displayed by the TV set and the predetermined value is the presence or absence of a scan line" AAPA discloses (col.1, lines 20-23, 39-45) that user watches programs on television set and if user cannot watch the program then the user records the program based on the program timing. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to change the power status to on/off based on an apparatus attached to it as taught by AAPA in order to control the channel selection and power control to save energy (col.1, lines 34-35).

Regarding **claim 8**, "a method wherein the line scan incorporates a signature unique to a broadcast service provider whose services are received through the STB" Unger discloses (§0031) that each receiver receives unique

level of programming from head-end.

Regarding **claim 9**, “a method wherein the predetermined value is presence or absence of the signature” AAPA discloses (col.1, lines 20-23, 39-45) that user watches programs on television set and if user cannot watch the program then the user records the program based on the program timing. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to change the power status to on/off based on an apparatus attached to it as taught by AAPA in order to control the channel selection and power control to save energy (col.1, lines 34-35).

Regarding **claim 10**, “an apparatus for controlling the power mode of a set top box (STB) when in communication with a TV set” reads on a low power receiver system (abstract) disclosed by Unger and represented in Fig. 3.

As to “the apparatus comprising: an electrical socket configured to receive the power plug of a TV set” Unger discloses (§0022) that the power supply receives power as represented in Fig. 3 (element 220).

Unger meets all the limitations of the claim except “the socket being electrically connectable to a mains electricity supply and including means for sensing changes in one or more characteristic parameters of the electricity supply passing through the socket and means for communicating the sensed changes to a controller of the STB.” However, AAPA discloses (col.3, lines 19-

33) that a VCR connected to STB sets a specific time to record a program. On that specific time, it starts recording program received from STB; however, if STB is off, then it powers on STB and starts recording the program. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to change the power status to on/off based on an apparatus attached to it as taught by AAPA in order to control the channel selection and power control to save energy (col.1, lines 34-35).

Regarding **claim 12**, "an apparatus for controlling the power mode of a set top box (STB) when in communication with a TV set, the apparatus comprising: a STB and a line scanner configured for monitoring the line scan of a cathode ray tube type TV set and able to communicate with a controller of the STB, whereby to monitor the line scan of images displayed on a screen of the TV set, the controller being configured to perform the method" AAPA discloses (col.1, lines 20-23, 39-45) that user watches programs received on receiver thru television set and if user cannot watch the program then the user set the timing to record the program so on the specified time VCR communicates with receiver's controller and starts recording program. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to change the power status to on/off based on an apparatus attached to it as taught by AAPA in order to control the channel selection and power control to save energy (col.1, lines 34-35).

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4. **Claims 2-3 and 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger et al in view of AAPA as applied to claim 1 above, and further in view of US Patent 6,308,278 B1 to Khouli et al (hereafter referenced as Khouli).

Regarding **claim 2**, combination of Unger and AAPA meets all the limitations of the claim except "a power control method wherein the operating signal is the electricity supply to the TV set." However, Khouli discloses (col.3, lines 32-36) that the power supply supplies the voltage to computer with display. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to supply electricity or current to the TV as taught by Khouli in order to efficiently use the television set to do the above-mentioned operations and also it would have yielded a predictable result to one ordinary skilled in the art.

Regarding **claim 3**, combination of Unger and AAPA meets all the limitations of the claim except "a power control method wherein the parameter is the current of the electricity supply" However, Khouli discloses (col.3, lines 32-36) that the power supply supplies the current to computer system with display. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to supply electricity or current to the TV as taught by Khouli in order to efficiently use the television set to do the above-mentioned operations and also it would have yielded a predictable result to one ordinary skilled in the art.

Regarding **claim 13**, the office assumes program recorded on a storage medium of a computer. Combination of Unger and AAPA meets all the limitations of the claim except "a computer program which when operated on a computer causes the computer to perform the method." However, Khoulouli discloses (col.5, lines 4-10) that the computer is programmed to automatically enter into power saving modes. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to write and execute a program on computer medium as taught by Khoulouli in order to efficiently use the computer program to do the above-mentioned operations and also it would have yielded a predictable result to one ordinary skilled in the art.

Regarding **claim 14**, "a set top box for a television incorporating a controller which includes a computer programmed with the computer program of claim 13." Khoulouli discloses (col.5, lines 4-10) that the computer is programmed to automatically enter into power saving modes. Khoulouli further discloses (col.7, lines 63-67) that the set-top box is connected to computer via 1394 bus. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to write and execute a program on computer medium as taught by Khoulouli in order to efficiently use the computer program to do the above-mentioned operations and also it would have yielded a predictable result to one ordinary skilled in the art.

5. **Claims 5-6 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger et al in view of AAPA as applied to claim 1 above, and further in view of US Patent 7,013,480 B2 to Campbell et al (hereafter referenced as Campbell).

Regarding **claim 5**, combination of Unger and AAPA meets all the limitations of the claim except "a power control method wherein the operating signal is the TV signal displayed on the TV set and the parameter is the frequency at which the signal is received." However, Campbell discloses (col.3, lines 29-36) that the television receiver receives video signals from gateway server which modulates these signals to a different channel frequency. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to produce video signals at different frequency as taught by Campbell in order to conserve bandwidth by distributing channels on multiple frequencies (col.1, lines 53-54).

Regarding **claim 6**, "a power control method wherein a predetermined value is the frequency or frequency band at which the STB receives services from the service provider whose broadcasts the STB is configured to receive" Campbell discloses (col.3, lines 16-28) that the gateway receives video contents in different frequencies from central office as represented in Fig. 1 (elements 22 and 30). Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to produce video signals at different frequency as taught by Campbell in order to conserve bandwidth by distributing channels on multiple

frequencies (col.1, lines 53-54).

Regarding **claim 11**, "an apparatus for controlling the power mode of a set top box (STB) when in communication with a TV set, the apparatus comprising; a STB having a controller and an RF cable able to communicate with the oscillator/mixer of a TV set" Unger discloses (§10007) that the receiver has the processor which controls all the operations of the receiver. Processor sends video signals to television set.

Combination of Unger and AAPA meets all the limitations of the claim except "with the controller of the STB, whereby to monitor the frequency or frequency band to which the oscillator/mixer is tuned, the controller being configured to perform the method." However, Campbell discloses (col.3, lines 29-36) that the television receiver receives video signals from gateway server which modulates these signals to a different channel frequency. Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to produce video signals at different frequency as taught by Campbell in order to conserve bandwidth by distributing channels on multiple frequencies (col.1, lines 53-54).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Publication 2003/0086383 A1 to Bremer et al discloses a method for reducing power in a communication device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PRC/
/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2623